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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/796,808

03/08/2004

Michael N. Kozicki

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7590

09/26/2005

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EXAMINER

KEBEDE, BROOK

ART UNIT

PAPER NUMBER

2823

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

4.8

Office Action Summary

Application No.

10/796,808

Applicant(s)

KOZICKI ET AL.

Examiner

Brook Kebede

Art Unit

2823

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-22 is/are allowed.
- 6) ☒ Claim(s) 23-25 and 31-33 is/are rejected.
- 7) ☒ Claim(s) 26-30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Terminal Disclaimer

1. The terminal disclaimer filed on May 25, 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 6,487,106 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Drawings

2. The drawings were received on May 25, 2005. These drawings are acceptable.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 23-25 and 31-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Kozicki et al. (US/6,418,049).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

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Re claim 23, Kozicki et al. disclose a method of forming a programmable microelectronic device, the method comprising the steps of: providing a substrate (610 910) (see Figs. 6 and 9); forming a first insulating layer (620 920) overlying the substrate (610 910); forming a first electrode (630 930) overlying the first insulating layer (620 920); forming an ion conductor (940) overlying the first electrode material (630 930); forming a second insulating layer (650 950) overlying the first insulating layer (620 920); forming a via (not labeled, see Figs. 6 and 9) within the second insulating layer (650 950); and filling at least a portion of the via with second electrode material (660 960) (see Figs. 6 and 9 and related text in Col. 8, line 59 through Col. 13, line 13).

Re claim 24, as applied to claim 23 above, Kozicki et al. disclose all the claimed limitations including the limitation wherein the step of forming the first electrode comprises deposition and etch processing (see Figs. 6 and 9 and related text in Col. 8, line 59 through Col. 13, line 13).

Re claim 25, as applied to claim 23 above, Kozicki et al. disclose all the claimed limitations including the limitation wherein the step of forming the second electrode comprises damascene processing (see Figs. 6 and 9 and related text in Col. 8, line 59 through Col. 13, line 13).

Re claim 31, as applied to claim 23 above, Kozicki et al. disclose all the claimed limitations including the limitation wherein the step of forming the second electrode comprises depositing oxidizable electrode material (see Figs. 6 and 9 and related text in Col. 8, line 59 through Col. 13, line 13).

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Re claim 32, as applied to claim 23 above, Kozicki et al. disclose all the claimed limitations including the limitation wherein the step of forming the second electrode comprises depositing indifferent electrode material (see Figs. 6 and 9 and related text in Col. 8, line 59 through Col. 13, line 13).

Re claim 33, as applied to claim 23 above, Kozicki et al. disclose all the claimed limitations including the limitation wherein the step of forming an ion conductor comprises depositing ion conductor material overlying the first electrode (see Figs. 6 and 9 and related text in Col. 8, line 59 through Col. 13, line 13).

Allowable Subject Matter

5. Claims 26-30 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 1-22 are allowed over prior art of record.

7. The following is a statement of reasons for the indication of allowable subject matter:
Claims 1-22 are allowed in view of the Terminal Disclaimer filed on May 25, 2005.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure Kozicki et al. (US/5,761,115) disclose similar inventive subject matter.

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Correspondence

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brook Kebede whose telephone number is (571) 272-1862. The examiner can normally be reached on 8-5 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Smith can be reached on (571) 272-1907. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brook Kebede

Brook Kebede
Examiner
Art Unit 2823

BK
July 29, 2005